

Please amend page 10, second full paragraph, to read:

A²
The ink channel unit 1 is constituted by a nozzle plate 3 with the nozzle orifices 8 bored, a channel forming plate 4 formed with a space corresponding to the pressure generating chamber 7 and a common ink reservoir 9, as well as an ink supply port 10 for communicating them, and a vibrating plate 5 for enclosing an opening of the pressure generating chamber 7, laminated together.

IN THE CLAIMS:

Please amend the claims in the following manner:

A³
1. (Once amended) An ink jet recording apparatus, comprising:
a recording head including a nozzle orifice communicated with a pressure generating chamber;
a pressure generator, which varies pressure of ink in the pressure generating chamber;
and
a controller, which drives the pressure generator to eject ink droplets from the nozzle orifice such that a plurality of sub-flushing operations are intermittently repeated in one flushing operation with a first time interval, when a recording operation of the recording head is not performed, each sub-flushing operation including a plurality of ink ejections repeated for a predetermined times with a second time interval which is shorter than the first time interval.

162 (Once amended) An ink jet recording apparatus, comprising:

a recording head including a nozzle orifice communicated with a pressure generating

chamber;

a pressure generator, which varies pressure of ink in the pressure generating chamber;

and

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a controller, which drives the pressure generator to eject ink droplets from the nozzle orifice such that a plurality of flushing operations are intermittently repeated with a first time interval, when a recording operation of the recording head is not performed, each flushing operation including a plurality of ink ejections repeated for a predetermined times with a second time interval which is shorter than the first time interval,

wherein an ejection frequency in a final flushing operation is higher than an ejection frequency in an initial flushing operation.

18A

(Once amended) An ink jet recording apparatus, comprising:

a recording head including a nozzle orifice communicated with a pressure generating chamber;

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and

a controller, which drives the pressure generator to eject ink droplets from the nozzle orifice such that a plurality of flushing operations are intermittently repeated with a first time interval, when a recording operation of the recording head is not performed, each flushing operation including a plurality of ink ejections repeated for a predetermined times with a second time interval which is shorter than the first time interval,

wherein the repeated number of ink ejection in a final flushing operation is greater than

the repeated number of ink ejection in an initial flushing operation.

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~~9~~. (Once amended) The ink jet recording apparatus as set forth in claim 1, the controller drives the pressure generator to vibrate a meniscus of ink in the nozzle orifice before an initial sub-flushing operation is performed.

As ~~8~~
~~10~~. (Once amended) The ink jet recording apparatus as set forth in claim 1, wherein: the recording head performs the recording operation while moving in a main scanning direction; and

the sub-flushing operations are performed when the recording head is in a stand-by state which is defined as a time period from when the recording head stops moving to when the recording head starts moving.

~~9~~
~~11~~. (Once amended) The ink jet recording apparatus as set forth in claim ~~10~~⁸, further comprising a timer, which measures a time period of the stand-by state,

wherein the repeated number of ink ejections in the respective sub-flushing operation is determined in accordance with the measured stand-by time period.

~~20~~
~~12~~. (Once amended) An ink jet recording apparatus, comprising:
a recording head including a nozzle orifice communicated with a pressure generating chamber;

a pressure generator, which varies pressure of ink in the pressure generating chamber;
and

a controller, which drives the pressure generator to eject ink droplets from the nozzle orifice such that a plurality of flushing operations are intermittently repeated with a first time interval, when a recording operation of the recording head is not performed, each flushing operation including a plurality of ink ejections repeated for a predetermined times with a second time interval which is shorter than the first time interval,

AS amended
wherein the recording head performs the recording operation while moving in a main scanning direction,

wherein the flushing operations are performed when the recording head is in a stand-by state which is defined as a time period from when the recording head stops moving to when the recording head starts moving,

wherein the apparatus further comprises a timer, which measures a time period of the stand-by state,

wherein the controller drives the pressure generator to vibrate a meniscus of ink in the nozzle orifice, and

wherein a vibrating number is determined in accordance with the measured length of the stand-by time period.

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13. (Once amended) The ink jet recording apparatus as set forth in claim 1, wherein the repeated number of ink ejection in the respective sub-flushing operations is determined in accordance with the type of ejected ink.

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17. (Once amended) An ink jet recording apparatus, comprising:

a recording head including a nozzle orifice communicated with a pressure generating chamber;

a pressure generator, which varies pressure of ink in the pressure generating chamber;
and

Amended
a controller, which drives the pressure generator to eject ink droplets from the nozzle orifice such that a plurality of flushing operations are intermittently repeated with a first time interval, when a recording operation of the recording head is not performed, each flushing operation including a plurality of ink ejections repeated for a predetermined times with a second time interval which is shorter than the first time interval,

wherein the controller includes:

a drive signal generator, which generates a common drive signal including a flushing waveform configured to perform an ink ejection and a meniscus vibrating waveform configured to vibrate a meniscus of ink in the nozzle orifice; and

a drive waveform selector, which applies the flushing waveform and the meniscus vibrating waveform selectively to the pressure generator.

Please add the following new claims:

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~~18.~~ (New) The ink jet recording apparatus as set forth in claim 1, wherein an ejection frequency in a final sub-flushing operation is higher than an ejection frequency in an initial sub-flushing operation.

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~~19.~~ (New) The flushing control method as set forth in claim **12**~~18~~, wherein an ejection

frequency in a latter sub-flushing operation is higher than an ejection frequency in a former sub-flushing operation.

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~~20.~~ (New) The flushing control method as set forth in claim 1, wherein the repeated number of ink ejection in a final sub-flushing operation is greater than the repeated number of ink ejection in an initial sub-flushing operation.

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~~21.~~ (New) The flushing control method as set forth in claim *14* ~~20~~, wherein the repeated number of ink ejection in a latter sub-flushing operation is greater than the repeated number of ink ejection in a former sub-flushing operation.

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cont.
22. (New) An ink jet recording apparatus, comprising:
a recording head including a nozzle orifice communicated with a pressure generating chamber;

a pressure generator, which varies pressure of ink in the pressure generating chamber;
and

a controller, which drives the pressure generator to eject ink droplets from the nozzle orifice such that an ejection frequency in a final flushing operation is higher than an ejection frequency in an initial flushing operation.

23. (New) The ink jet recording apparatus as set forth in claim 22, further comprising a timer, which measures a time period of a stand-by state, wherein:

the stand-by state time period from when the recording head stops moving to when the

recording head starts moving;

the controller drives the pressure generator to vibrate a meniscus of ink in the nozzle orifice; and

a vibrating number is determined in accordance with the measured length of the stand-by state time period.

24. (New) The ink jet recording apparatus as set forth in claim 22, further comprising a drive signal generator, which generates a common drive signal including a flushing waveform configured to perform an ink ejection and a meniscus vibrating waveform configured to vibrate a meniscus of ink in the nozzle orifice.

REMARKS

Claims 1-17 have been examined. Claims 1 and 10 have been rejected under 35 U.S.C. § 102(b), and claims 6-9, 11, and 13-16 have been rejected under 35 U.S.C. § 103(a). Also, the Examiner has indicated that claims 2-5, 12, and 17 contain allowable subject matter.

I. Corrections to the Specification

Applicant has amended the specification to correct minor typographical errors.